

In the Specification

Please amend the specification as follows to correct the informalities indicated in item 2 of the Office Action.

Please replace the paragraph beginning on page 1, line 9 with the following amended paragraph:

There is often a need to measure various parameters of electrical signals. For example, in the manufacture of semiconductor devices, it is desirable to measure parameters of the signals produced by those devices to verify that the devices are operating properly. Information obtained through testing can be used to identify and discard devices that fail to exhibit the expected performance. Test results can sometimes be used to alter the steps in the process used to make the devices. The devices might, for example, be calibrated in subsequent process steps so that they do exhibit expected performance or the devices might be packaged for sale as parts that meet relaxed performance specifications. Alternatively, the results of tests might also be used in a yield enhancement system to change parameters of processing equipment.

Please replace the paragraph beginning on page 2, line 5 with the following amended paragraph:

Differential signal S_{in} has two legs, S_{in+} and S_{in-} . The signal is represented as the difference in voltage on these legs. The output of the differential amplifier 116 is a single ended analog signal representing the difference in voltage on legs S_{in+} and S_{in-} .

Please replace the paragraph beginning on page 4, line 1 with the following amended paragraph:

If the ~~measurements~~ measurement is repeated with different values of V_{comp+} , it is possible to find some value of V_{comp+} at which the output of comparator 110 is HI and another, slightly larger value of V_{comp+} at which the output of comparator 110 is LO. At the time determined by the strobe signal, it could be determined that the value of the signal S_{in} is between these two values of V_{comp+} .

Please replace the paragraph beginning on page 6, line 1 with the following amended paragraph:

In another aspect, the invention relates to an automatic test system suitable for making measurements of a differential signal applied as an input to the test system. The test system has measurement circuitry that includes a comparator. The comparator has a first and second signal input terminals and an output providing a logical signal indicating the results of a comparison. A timing input to the comparator controls the time at which a comparison is made. The measurement circuit also includes means for biasing the comparison by a variable amount in response to a control signal and control circuitry that provides a timing signal connected to the timing input of the comparator and a control signal to the means for biasing. The test system also includes data analysis circuitry having an input coupled to the output of the comparator, the data analysis circuitry determining parameters of the differential signal from the output of the comparator.